

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the remarks herewith, which place the application into condition for allowance.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 13-15 are currently pending and are independent.

II. REJECTIONS UNDER 35 U.S.C. §102

Claims 13-15 were rejected under 35 U.S.C. §102 as allegedly anticipated by U.S. Patent No. 6,018,642 to Adachi.

Applicant respectfully traverses this rejection.

Independent claim 13 is representative and recites, *inter alia*:

“ . . . transmitting main beacons at a fixed interval to perform synchronization in said wireless communication system and for transmitting sub beacons between said main beacons

...
data division means for comparing beacon time period information that is included in said main beacon and said sub beacon received and indicates a period of time until said main beacon is transmitted next, with a required transmission time of transmission data, and when said required transmission time is said beacon time period information or longer, dividing said transmission data so that transmission of the transmission data divided is finished before next transmission of said main beacon is started.” (Emphasis added).

As understood by the Applicants, Adachi describes, in relevant part a device that adjusts the beacon interval or sending data in which priority is added. That is, the time interval between

beacon signals is varied and data is transmitted to a mobile station with a priority. Col. 3, lines 35-41.

In contrast, claim 13 recites, “. . . transmitting main beacons at a fixed interval . . . data division means for comparing beacon time period . . . with a required transmission time of transmission data, and when said required transmission time is said beacon time period information or longer, dividing said transmission data so that transmission of the transmission data divided is finished before next transmission of said main beacon is started.” That is, an aspect of the present invention is division of transmission data by the terminals. The terminals send data that is divided so as to be able to finish transmission of the data before the transmission of the main beacon. A collision between the beacon and the data is avoided.

In the present invention, when the packet length of the downlink data packet is the effective packet length or shorter, the base station transmits the downlink data packet. However, when the data length of the downlink data packet is longer than the effective packet length, the base station divides the downlink data packet into data packets which are the effective packet length or shorter and transmits the downlink data packets. Similarly, when the data length of the uplink data packet is longer than the effective packet length, the terminal station divides the uplink data packet into packets which are the effective packet length or shorter for transmission.

Thus, in an aspect of the present invention, a wireless communication device includes a beacon with a fixed time interval between beacons, in a main beacon and a sub beacon, and transmits them, and a wireless terminal device divides and transmits data based on the fixed beacon time interval so the transmission of the data is finished before transmission of the main

beacon is started. Thus, the beacon time interval is fixed while preventing overlap of beacon transmissions and the data transmission.

The Office Action points to Adachi col. 6, lines 45-69 for the above recited feature of claim 13. However, at the cited location, Adachi does not describe the division of the transmission data based on a fixed beacon time interval. Indeed, Adachi seems to be describing variation of the data transmission interval. Adachi describes the base station extending the data receive-ready period to continuously receive data transmitted from the mobile station. There is no suggestion in Adachi of a device to divide the transmitted data so as to complete transmission based on the fixed beacon time interval.

Claim 13 is believed patentable over Adachi because that reference does not disclose each and every limitation recited in the claim.

For reasons similar or somewhat similar to those described above with regard to independent claim 13, independent claims 14 and 15 are also believed to be patentable.

CONCLUSION

Claims 13-15 are in condition for allowance. In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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